

WHAT IS CLAIMED IS:

1. An operating mechanism (1) for at least one brake, in particular a parking brake, comprising an actuator (30) connected to at least one brake cable (60); and a load sensor (40) for determining the mechanical load of the at least one brake cable (60) wherein the mechanical load of the at least one brake cable (60) is determined via the actuator (30) in a manner decoupled from the at least one brake cable (60).
2. The operating mechanism (1) according to claim 1, characterized in that said actuator (30) is driven by an electric motor (5) via a gear (10).
3. The operating mechanism (1) according to claim 1, characterized in that said actuator (30) changes its position in direction of its longitudinal axis dependent on the mechanical load of the at least one brake cable (60).
4. The operating mechanism (1) according to claim 1, characterized in that said actuator (30) comprises a gear wheel (31), a spindle (34) and a nut (35).
5. The operating mechanism (1) according to claim 4, characterized in that a first end (34a) of said spindle (34) being complementary shaped to a concentric, profiled opening (31a) of said gear wheel (31) and being guided therein so that a rotation of the gear wheel (31) is transmitted to said spindle (34) and that at the same time a displacement of said first end (34a) of said spindle (34) is possible in axial direction within said concentric, profiled opening (31a) of said gear wheel (31).

6. The operating mechanism (1) according to claim 5, characterized in that said first end (34a) of said spindle (34) comprises a stopper (34c) so that said spindle (34) cannot be completely removed from said concentric, profiled opening (31a) of said gear wheel (31).
7. The operating mechanism (1) according to claim 6, characterized in that said spindle (34) comprises a second end (34b) on which a rotation-decoupled stopper (34d) is mounted.
8. The operating mechanism (1) according to claim 7, characterized in that said rotation-decoupled stopper (34d) comprises a magnet fixing (43a) with a magnet (43).
9. The operating mechanism (1) according to claim 8, characterized in that a Hall-chip (41) in a Hall-chip fixing (42) is arranged opposite of and spaced apart from said magnet (43) wherein a spring (45) is positioned between said magnet fixing (43a) and said Hall-chip fixing (41a).
10. The operating mechanism (1) according to claim 4, characterized in that said nut (35) is guided on a thread (34G) of said spindle (34) by a respective inside thread.
11. The operating mechanism (1) according to claim 10, characterized in that two Bowden cables (70) are coupled to said nut (35) via coupling facilities being symmetrically arranged to said spindle (34) wherein said Bowden cables (70) are connected to said at least one brake cable (60).

12. The operating mechanism (1) according to claim 4, characterized in that said nut (35) is configured as a coupling mechanism (80) comprising a nut with an arc-shaped outer surface and a movable lever (84) mounted thereon.
13. The operating mechanism (1) according to claim 12, characterized in that said movable lever (84) comprises coupling facilities for at least two brake cables (60) so that at least two brakes can be directly operated via said actuator (30).
14. The operating mechanism (1) according to one of the preceding claims, characterized in that microswitches are arranged along said spindle (34) or parallel to said spindle (34) on said housing (20) which are switched by said nut (35) or by said coupling mechanism (80) and thereby generate a signal which indicates that maintenance has to be carried out.
15. An operating mechanism (100) for at least one brake, particularly a parking brake, comprising:
 - a. an actuator (130) having a spindle (134) which is connected to at least one brake cable (160); and
 - b. a load sensor (140) for determining the mechanical loading of the at least one brake cable (160), **characterized in that**

- c. said spindle (134) is load controlled axially displaceable whereby the mechanical loading is uniformly distributed between the at least one brake cable (160) and a second brake cable (160) via the load-dependent spindle displacement.
16. Operating mechanism (100) according to claim 15, characterized in that said actuator (130) comprises said axially displaceable spindle (134) having a thread (134G) and a nut (135) guided thereon for mounting said at least one brake cable (160).
17. Operating mechanism (100) according to claim 16, characterized in that said spindle (134) is driven by an electric motor (105) via a gear (110) having a gear wheel (131).
18. Operating mechanism (100) according to claim 17, characterized in that a guiding portion (136) of said spindle (134) is complementary shaped to a concentric profiled opening (131a) of said gear wheel (131) and that it is guided in such a way in said concentric profiled opening of the gear wheel (131) that a rotation of the gear wheel (131) is transmitted to said spindle (134) and at the same time a displacement of said guiding portion (134a) of said spindle (134) is possible in axial direction of said spindle (134) within the concentric profiled opening (131a) of said gear wheel (131).
19. Operating mechanism (100) according to claim 18, characterized in that said guiding portion (136) of said spindle (134) comprises a rib and that said gear wheel (131) comprises a recess complementary shaped to said rib in said concentric opening (131a) or vice versa for forming a positive connection between said spindle (134) and said gear wheel (131).

20. Operating mechanism (100) according to claim 19, characterized in that said second brake cable (160) is mounted on said guiding portion (136) of said spindle (134).
21. Operating mechanism (100) according to claim 16, characterized in that said thread (134G) of said spindle (134) is limited by a stopper so that said nut (135) cannot be screwed from said spindle (134).
22. Operating mechanism (100) according to claim 15, characterized in that said load sensor (140) is connected to said spindle (134) for measuring the mechanical loading of the brake cables (160).
23. Operating mechanism (100) according to claim 16, characterized in that said operating mechanism (100) comprises a housing (120) having at least one displacement portion (125) in which said nut (135) is guided and displaced and by which the rotation of said nut (135) is prevented.